

IN THE CLAIMS:

The present listing of claims replaces all prior versions, and listings of claims in the application.

Claim 1. (Currently Amended) A dispersion comprising:
polyanions; and
cationic 3,4-polyalkylenedioxythiophenes; and
water or a water/alcohol mixture as a solvent comprising water and optionally alcohol,

wherein said dispersion has a weight ratio of cationic 3,4-polyalkylene-dioxythiophene to polyanion of from 1 : 8 to 1 : 25, said dispersion being prepared by high pressure homogenization under a pressure of 100 to 1000 bar, wherein about and 90% of the particles of the dispersion are being less than 50 40 nm,

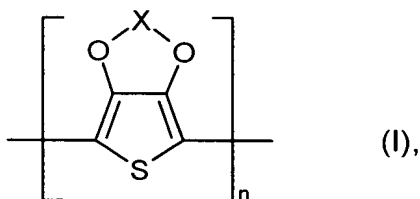
and further wherein the resistivity of the a coating[[s]] produced therefrom from said dispersion has a resistivity of by building a dispersion film and removing the solvent from the dispersion film is at least 5000 Ω cm, wherein the weight ratio of cationic 3,4 polyalkylene dioxythiophene to polyanion have a ration ranging from between about 1:8 and about 1:25 and which was treated by high pressure homogenization applying a pressure from 100 to 1000 bar

said coating being prepared by applying said dispersion to a glass substrate at a thickness of 200 nm, drying the applied dispersion at a temperature of 100°C to 300°C thereby forming said coating, vapor-depositing parallel gold metal strips each having a length of 20 mm and a width of 2 mm and being separated by 3 mm onto said coating by means of a mask, the resistivity being determined from resistance measured between said parallel gold metal strips, said resistance being measured in a vacuum and by means of a four-pole method.

Claim 2. (Cancelled)

Claim 3. (Cancelled)

Claim 4. (Currently Amended) The dispersion according to Claim 1, wherein the 3,4-polyalkylenedioxythiophenes are ~~compounds of the~~ represented by formula (I),



wherein,

n is an integer from 3 to 100, ~~preferably from 4 to 15~~, and

X is $-(CH_2)_x-CR^1R^2-(CH_2)_y-$, wherein

R¹ and R², independently of one another, are selected from the group consisting of H, an optionally substituted alkyl radical having from 1 to 20 carbon atoms, an aryl radical having from 6 to 14 carbon atoms, ~~or~~ and $-CH_2-OR^3$,

wherein R³ is selected from the group consisting of H, alkyl ~~or~~ and $-CH_2-CH_2-CH_2-SO_3H$,

and

x and y are each, independently of one another, an integer from 0 to 9.

Claim 5. (Original) The dispersion according to Claim 1, wherein the dispersion is a 3,4-polyethylenedioxythiophene / polystyrene sulfonate dispersion.

Claims 6-8. (Cancelled)

Claim 9. (Currently Amended) ~~[[A]]~~ The dispersion according to Claim 4, wherein n is an integer from 4 to 15.